

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please add new claims 14-17 as follows:

Listing of Claims

1. (Previously Presented) An autonomous robot apparatus which communicates with a communication apparatus by radio and independently determines an action in accordance with an instruction from a user or a surrounding environment, the robot apparatus comprising:

measuring means for measuring a quality of communication of radio signals received from the communication apparatus;

determining means for determining the action on the basis of the communication quality measured by the measuring means; and

processing means for performing a process of allowing the robot apparatus to physically communicate loss of radio communication with the communication apparatus to the user.

2. (Original) The robot apparatus according to claim 1, wherein the determining means determines the action on the basis of the details of the current action of the robot apparatus and the communication quality measured by the measuring means.

3. (Original) The robot apparatus according to claim 1, wherein
the determining means determines the generation of predetermined speech, and
the processing means outputs the speech through a speaker.

4. (Previously Presented) A information processing method for an autonomous robot apparatus which communicates with a communication apparatus by radio and independently determines an action in accordance with an instruction from a user or a surrounding environment, the method comprising the steps of:

a measuring step of measuring a quality of communication of radio signals received from the communication apparatus;

a determining step of determining the action on the basis of the communication quality measured in the measuring step; and

a processing step of performing a process of allowing the robot apparatus to physically communicate loss of radio communication with the communication apparatus to the user.

5. (Previously Presented) A computer readable medium having a program for an autonomous robot apparatus which communicates with a communication apparatus by radio and independently determines an action in accordance with an instruction from a user or a surrounding environment, the program allowing a computer to execute a process comprising the steps of:

a measuring step of measuring a quality of communication of radio signals received from the communication apparatus;

a determining step of determining the action on the basis of the communication quality measured in the measuring step; and

a processing step of performing a process of allowing the robot apparatus to physically communicate loss of radio communication with the communication apparatus to the user.

6. (Previously Presented) The robot apparatus according to claim 1, wherein the measured communication quality of the radio signals is measured for a predetermined time and for a predetermined threshold.

7. (Previously Presented) The robot apparatus according to claim 1, wherein the measuring means outputs state recognition information, based on the measured communication quality, to the determining means.

8. (Previously Presented) The robot apparatus according to claim 1, wherein the measured communication quality of received signals is supplied from sensors.

9. (Previously Presented) The robot apparatus according to claim 8, wherein the measuring means outputs state recognition information for the sensors, based on the measured communication quality, to the determining means.

10. (Previously Presented) The robot apparatus according to claim 8, wherein the sensors include a head sensor, foot bottom sensors, acceleration sensor, microphone and camera.

11. (Previously Presented) The robot apparatus according to claim 7, wherein the determining means determines a next action based on the state recognition information, previous state recognition information from a storage means and elapsed time.

12. (Previously Presented) The robot apparatus according to claim 9, wherein the determining means determines a next action based on the state recognition information, previous state recognition information from a storage means and elapsed time.

13. (Previously Presented) The robot apparatus according to claim 1, wherein the communication quality includes signal strength corresponding to resistance to noise or error rate in a communication packet due to burst interference.

14. (New) The robot apparatus according to claim 1, wherein the robot apparatus notifies the user of the loss of radio communication using functions peculiar to the robot apparatus.

15. (New) The robot apparatus according to claim 1, wherein the robot apparatus notifies the user of the loss of radio communication using speech.

16. (New) The robot apparatus according to claim 1, wherein the robot apparatus notifies the user of the loss of radio communication via a gesture.

17. (New) The robot apparatus according to claim 1, wherein the robot apparatus is in standby state after notifying the user of the loss of radio communication until receiving an instruction from the user.